

This listing of claims will replace all prior versions, and listings, of claims in the application:

The Status of the Claims

1. (Currently Amended) A method for ~~transcoding~~ a transcoder to transcode metadata included in a media signal conveyed via a home network from a first media format associated with a first media consumption device to a second media format detectable by a media metering device configured to meter a second media consumption device, the method comprising:

extracting the metadata from the media signal using the transcoder to form extracted metadata;

querying the media metering device determining via the home network to determine a sensing capability of the [[a]] media metering device to sense a media output signal from the media content consumption associated with a second media consumption device communicatively coupled to the home network, wherein the media metering device is to collect audience measurement data associated with the second media consumption device;

identifying the determining a second media format based on the determined sensing capability of the media metering device, to sense media content consumption the second media format detectable by the media metering device;

converting the extracted metadata from the [[a]] first media format associated with the [[a]] first media consumption device communicatively coupled to the home network to the identified second media format associated with detectable by the media metering device to form converted media information; and

sending the converted media information to at least one of the second media consumption device or the media metering device via the home network.

2. (Original) A method as defined in claim 1, further comprising converting media content associated with the media signal from a third media format to a fourth media format to form the converted media information.

3. (Currently Amended) A method as defined in claim 1, further comprising ~~wherein converting the extracted metadata from the first media format to the second media format to form the converted media information comprises~~ identifying at least one of the first media format ~~or the second media format~~ prior to converting the extracted metadata.

4. (Canceled)

5. (Currently Amended) A method as defined in ~~claim 4~~ claim 1, wherein identifying the second media format ~~detectable by the media metering device~~ comprises identifying at least one of an audio watermark sensor, a video watermark sensor, a digital bitstream sensor, a database sensor, or a software sensor associated with the media metering device.

6. (Original) A method as defined in claim 1, wherein converting the extracted metadata from the first media format to the second media format to form the converted media information comprises:

detecting a watermark associated with the media signal;
identifying a signal compression ratio associated with the watermark; and
modifying the signal compression ratio based on the second media format.

7. (Previously Presented) A method as defined in claim 6, wherein modifying the signal compression ratio based on the second media format comprises comparing an output bit rate associated with the signal compression ratio to a network bit rate associated with the home network.

8. (Previously Presented) A method as defined in claim 6, wherein modifying the signal compression ratio based on the second media format comprises changing an output bit rate based on a network bit rate associated with the home network.

9. (Original) A method as defined in claim 1, wherein converting the extracted metadata from the first media format to the second media format to form the converted media information comprises:

generating a watermark based on the second media format; and
inserting the watermark in the converted media information.

10. (Previously Presented) A method as defined in claim 9 further comprising providing correlation information associated with the watermark and the converted media information to at least one of a data measurement collection device or a data collection facility.

11. (Original) A method as defined in claim 1, wherein converting the extracted metadata from the first media format to the second media format to form the converted media information comprises:

encoding the extracted metadata in the second media format; and

digitally inserting encoded metadata into a bitstream associated with the converted media information.

12. (Original) A method as defined in claim 1, wherein converting the extracted metadata from the first media format to the second media format to form the converted media information comprises converting the extracted metadata to cause converted media content to be stored in a database.

13. (Original) A method as defined in claim 1, wherein converting the extracted metadata from the first media format to the second media format to form the converted media information comprises converting the extracted metadata to cause converted metadata to be extracted from the second media consumption device based on an application program interface associated with the second media consumption device.

14. (Original) A method as defined in claim 1, wherein extracting the metadata from the media signal comprises demultiplexing the media signal.

15. (Original) A method as defined in claim 1 further comprising generating a converted media signal having the converted media information, wherein the converted media information includes at least one of converted media content and converted metadata associated with the converted media content.

16. (Canceled)

17. (Original) A method as defined in claim 1, further comprising monitoring media consumption based on the converted media information.

18. (Previously Presented) A method as defined in claim 1, wherein the metadata comprises at least one of content identification information, source identification information, destination device identification information, distribution channel identification information, timestamps associated with at least one of creation and generation of media content, or information associated with the media signal.

19. (Previously Presented) A method as defined in claim 18, wherein the information associated with the media signal comprises at least one of frequency information, format information, signal strength information, bit rate information, frame rate information, or sampling frequency information.

20. (Previously Presented) A method as defined in claim 1, wherein at least one of the first media consumption device or the second media consumption device is one of a television, a radio, a personal computer, a personal digital assistant, a telephone, a digital video disk player, or a personal video recorder.

21. (Previously Presented) A method as defined in claim 1, wherein the home network comprises at least one of a wired network or a wireless network.

22. (Previously Presented) A method as defined in claim 1, wherein the home network comprises at least one of a server, a database, or a data measurement collection device.

23. (Canceled)

24. (Currently Amended) An apparatus for transcoding a media signal conveyed via a home network comprising:

a network interface to communicate the media signal between a first media consumption device and a second media consumption device configurable to be communicatively coupled to the home network;

an extracting device coupled to the network interface and configured to extract metadata from the media signal to form extracted metadata; ~~[[and]]~~

an encoding device coupled to the network interface and configured to ~~determine~~ query a media metering device via the home network to determine a sensing capability of the ~~[[a]]~~ media metering device to sense a media output signal from ~~media content consumption associated with~~ the second media consumption device, wherein the media metering device is to collect audience measurement data associated with the second media consumption device, and ~~wherein the encoding device is to determine~~

an identification device to identify a second media format based on the determined sensing capability of the media metering device ~~to sense media content consumption, the second media format detectable by the media metering device, wherein~~ the encoding device is to convert the extracted metadata from a first media format associated with the first media consumption device to the identified second media format detectable by the media metering device ~~associated with the second media consumption device~~ to form converted media information.

25. (Original) An apparatus as defined in claim 24, wherein the encoding device is configured to convert media content associated with the media signal from a third media format to a fourth media format to form the converted media information.

26. (Currently Amended) An apparatus as defined in claim 24 ~~further comprising an~~
wherein the identification device is coupled to the network interface and configured to identify at
~~least one of the first media format or the second media format.~~

27. (Canceled)

28. (Currently Amended) An apparatus as defined in ~~claim 26~~ claim 24, wherein the
identification device is configured to identify at least one of an audio watermark sensor, a video
watermark sensor, a digital bitstream sensor, a database sensor, or a software sensor associated
with the media metering device.

29. (Currently Amended) An apparatus as defined in ~~claim 26~~ claim 24, wherein the
identification device is configured to detect a watermark associated with the media signal and to
identify a signal compression ratio associated with the watermark, and wherein the encoding
device is configured to modify the signal compression ratio based on the second media format.

30. (Previously Presented) An apparatus as defined in claim 29, wherein the
encoding device is configured to compare an output bit rate associated with the signal
compression ratio to a network bit rate of the home network and adjust the output bit rate based
on the network bit rate.

31. (Currently Amended) An apparatus as defined in ~~claim 26~~ claim 24, wherein the identification device and the encoding device are integrated within a single device.

32. (Original) An apparatus as defined in claim 24 further comprising a watermark generator configured to generate a watermark based on the second media format and insert the watermark in the converted media information.

33. (Previously Presented) An apparatus as defined in claim 32, wherein the watermark generator is configured to provide correlation information associated with the watermark and the converted media information to at least one of a data measurement collection device or a data collection facility.

34. (Original) An apparatus as defined in claim 24, wherein the encoding device is configured to encode the metadata in the second media format and to digitally insert encoded metadata into a bitstream associated with the converted media information.

35. (Original) An apparatus as defined in claim 24, wherein the converted media information is configured to cause converted media content to be stored in a database.

36. (Original) An apparatus as defined in claim 24, wherein the converted media information is configured to cause converted metadata to be extracted from the second media consumption device based on an application program interface associated with the second media consumption device.

37. (Previously Presented) An apparatus as defined in claim 24, wherein the encoding device is configured to generate a converted media signal having the converted media information, and wherein the converted media information includes at least one of converted media content or converted metadata associated with the converted media content.

38. (Previously Presented) An apparatus as defined in claim 24, wherein the network interface is configured to transmit a converted media signal having the converted media information to at least one of the second media consumption device or the media metering device associated with the second media consumption device, and wherein the converted media information includes at least one of converted media content or converted metadata associated with the converted media content.

39. (Original) An apparatus as defined in claim 24, wherein the network interface is configured to receive the media signal from the first media consumption device.

40. (Original) An apparatus as defined in claim 24, wherein the extracting device comprises a demultiplexer.

41. (Original) An apparatus as defined in claim 24 further comprising a memory to store the media signal.

42. (Previously Presented) An apparatus as defined in claim 24, wherein the metadata comprises at least one of content identification information, source identification information, destination device identification information, distribution channel identification information, timestamps associated with at least one of creation and generation of media content, or information associated with the media signal.

43. (Previously Presented) An apparatus as defined in claim 42, wherein the information associated with the media signal comprises at least one of frequency information, format information, signal strength information, bit rate information, frame rate information, or sampling frequency information.

44. (Previously Presented) An apparatus as defined in claim 24, wherein at least one of the first media consumption device or the second media consumption device is one of a television, a radio, a personal computer, a personal digital assistant, a telephone, a digital video disk player, or a personal video recorder.

45. (Previously Presented) An apparatus as defined in claim 24, wherein the home network comprises at least one of a wired network or a wireless network.

46. (Previously Presented) An apparatus as defined in claim 24, wherein the home network comprises at least one of a server, a database, or a data collection measurement device.

47. (Previously Presented) An apparatus as defined in claim 24 integrated with at least one of a set top box, the first media consumption device, the second media consumption device, or a metering device associated with at least one of the first media consumption device or the second media consumption device.

48. (Canceled)

49. (Canceled)

50. (Currently Amended) A tangible machine accessible medium having machine-readable instructions stored thereon that, when executed by a machine, cause the machine to:

extract metadata from a media signal conveyed via a home network to form extracted metadata;

query a media metering device ~~determine~~ via the home network to determine a sensing capability of the [[a]] media metering device to sense a media output signal from the media content consumption associated with a second media consumption device communicatively coupled to the home network, wherein the media metering device is to collect audience measurement data associated with the second media consumption device;

identify ~~determine~~ a second media format based on the determined sensing capability of the media metering device, the second media format detectable by the media metering device ~~to sense media content consumption~~;

convert the extracted metadata from a first media format associated with a first media consumption device communicatively coupled to the home network to the identified second media format ~~associated with~~ detectable by the media metering device to form converted media information; and

send the converted media information to at least one of the second media consumption device or the media metering device via the home network.

51. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the instructions, when executed, cause the machine to convert media content associated with the media signal from a third media format to a fourth media format to form the converted media information.

52. (Currently Amended) A tangible machine accessible medium as defined in claim 50, wherein the instructions, when executed, cause the machine to identify ~~at least one of the first media format or the second media format~~ prior to converting the extracted metadata.

53. (Canceled)

54. (Currently Amended) A tangible machine accessible medium as defined in ~~claim 53~~ claim 50, wherein the instructions, when executed, cause the machine to identify the second media format ~~detectable by the media metering device~~ by identifying at least one of an audio watermark sensor, a video watermark sensor, a digital bitstream sensor, a database sensor, or a software sensor associated the media metering device.

55. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the instructions, when executed, cause the machine to convert the extracted metadata from the first media format to the second media format to form the converted media information by:

detecting a watermark associated with the media signal;
identifying a signal compression ratio associated with the watermark; and
modifying the signal compression ratio based on the second media format.

56. (Previously Presented) A tangible machine accessible medium as defined in claim 55, wherein the instructions, when executed, cause the machine to modify the signal compression ratio based on the second media format by comparing an output bit rate associated with the signal compression ratio to a network bit rate associated with the home network.

57. (Previously Presented) A tangible machine accessible medium as defined in claim 55, wherein the instructions, when executed, cause the machine to modify the signal compression ratio based on the second media format by changing an output bit rate based on a network bit rate associated with the home network.

58. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the instructions, when executed, cause the machine to convert the extracted metadata from the first media format to the second media format to form the converted media information by:

generating a watermark based on the second media format; and
inserting the watermark in the converted media information.

59. (Previously Presented) A tangible machine accessible medium as defined in claim 58, wherein the instructions, when executed, cause the machine to provide correlation information associated with the watermark and the converted media information to at least one of a data measurement collection device or a data collection facility.

60. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the instructions, when executed, cause the machine to convert the extracted metadata from the first media format to the second media format to form the converted media information by:

encoding the metadata in the second media format; and

digitally inserting encoded metadata into a bitstream associated with the converted media information.

61. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the instructions, when executed, cause the machine to convert the extracted metadata from the first media format to the second media format to form the converted media information by converting the extracted metadata to cause converted media content to be stored in a database.

62. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the instructions, when executed, cause the machine to convert the extracted metadata from the first media format to the second media format to form the converted media information by converting the extracted metadata to cause converted metadata to be extracted from the second media consumption device based on an application program interface associated with the second media consumption device.

63. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the instructions, when executed, cause the machine to extract the metadata from the media signal by demultiplexing the media signal.

64. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the instructions, when executed, cause the machine to generate a converted media signal having the converted media information, and wherein the converted media information includes at least one of converted media content or converted metadata associated with the converted media content.

65. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the instructions, when executed, cause the machine to transmit a converted media signal having the converted media information to at least one of the second media consumption device or the media metering device associated with the second media consumption device, and wherein the converted media information includes at least one of converted media content or converted metadata associated with the converted media content.

66. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the instructions, when executed, cause the machine to monitor media consumption based on the converted media information.

67. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the metadata comprises at least one of content identification information, source identification information, destination device identification information, distribution channel identification information, timestamps associated with at least one of creation and generation of media content, or information associated with the media signal.

68. (Previously Presented) A tangible machine accessible medium as defined in claim 67, wherein the information associated with the media signal comprises at least one of frequency information, format information, signal strength information, bit rate information, frame rate information, or sampling frequency information.

69. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein at least one of the first media consumption device or the second media consumption device is one of a television, a radio, a personal computer, a personal digital assistant, a telephone, a digital video disk player, or a personal video recorder.

70. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the home network comprises at least one of a wired network or a wireless network.

71. (Previously Presented) A tangible machine accessible medium as defined in claim 50, wherein the home network comprises at least one of a server, a database, or a data measurement collection device.

72. (Canceled)

73. (Currently Amended) A system for transcoding a media signal conveyed via a home network comprising:

a first media consumption device communicatively coupled to the home network;

a second media consumption device communicatively coupled to the first media consumption device and the home network;

a media metering device communicatively coupled to the second media consumption device to collect audience measurement data associated with the second media consumption device; and

a transcoding device communicatively coupled to at least one of the first media consumption device, the second media consumption device, or the media metering device, and configured to:

extract metadata from the media signal to form extracted metadata;

query the media metering device via the home network to determine a sensing capability of the media metering device to sense a media output signal from the second media consumption device;

identify a second media format based on the determined sensing capability of the media metering device, the second media format detectable by the media metering device; and

convert the extracted metadata from a first media format associated with the first media consumption device to ~~[[a]] the identified~~ second media format ~~associated with the second media consumption device based on a media content consumption sensing capability of detectable by the media metering device detected by the transcoding device via the home network~~ to form converted media information.

74. (Original) A system as defined in claim 73, wherein the transcoding device is configured to convert media content associated with the media signal from a third media format to a fourth media format to form the converted media information.

75. (Currently Amended) A system as defined in claim 73, wherein the transcoding device is configured to identify ~~at least one of the first media format or the second media format~~ prior to converting the extracted metadata.

76. (Canceled)

77. (Currently Amended) A system as defined in ~~claim 76~~ claim 73, wherein the transcoding device is configured to configured to identify at least one of an audio watermark sensor, a video watermark sensor, a digital bitstream sensor, a database sensor, or a software sensor associated with the media metering device.

78. (Original) A system as defined in claim 73, wherein the transcoding device is configured to detect a watermark associated with the media signal, to identify a signal compression ratio associated with the watermark, and to modify the signal compression ratio based on the second media format.

79. (Original) A system as defined in claim 78, wherein the transcoding device is configured to compare an output bit rate associated with the signal compression ratio to a system bit rate of the system and adjust the output bit rate based on the system bit rate.

80. (Previously Presented) A system as defined in claim 78, wherein the transcoding device is configured to change an output bit rate based on a network bit rate associated with the home network.

81. (Original) A system as defined in claim 73, wherein the transcoding device is configured to generate a watermark based on the second media format and insert the watermark in the converted media information.

82. (Previously Presented) A system as defined in claim 81, wherein the transcoding device is configured to provide correlation information associated with the watermark and the converted media information to at least one of a data measurement collection device or a data collection facility.

83. (Original) A system as defined in claim 73, wherein the transcoding device is configured to encode the extracted metadata in the second media format and digitally insert encoded metadata into a bitstream associated with the converted media information.

84. (Original) A system as defined in claim 73, wherein the converted media information causes converted media content to be stored in a database.

85. (Original) A system as defined in claim 73, wherein the converted media information causes converted metadata to be extracted from the second media consumption device based on an application program interface associated with the second media consumption device.

86. (Previously Presented) A system as defined in claim 73, wherein at least one of the first media consumption device or the media metering device is configured to extract the metadata from the media signal.

87. (Previously Presented) A system as defined in claim 73, wherein the transcoding device is configured to generate a converted media signal having the converted media information, and wherein the converted media information includes at least one of converted media content or converted metadata associated with the converted media content.

88. (Previously Presented) A system as defined in claim 73, wherein the transcoding device is configured to transmit a converted media signal having the converted media information to at least one of the second media consumption device or the media metering device, and wherein the converted media information includes at least one of converted media content or converted metadata associated with the converted media content.

89. (Previously Presented) A system as defined in claim 73, wherein the media metering device is configured to monitor media consumption based on the converted media information.

90. (Previously Presented) A system as defined in claim 73, wherein the metadata comprises at least one of content identification information, source identification information, destination device identification information, distribution channel identification information, timestamps associated with at least one of creation and generation of media content, or information associated with the media signal.

91. (Previously Presented) A system as defined in claim 90, wherein the information associated with the media signal comprises at least one of frequency information, format information, signal strength information, bit rate information, frame rate information, or sampling frequency information.

92. (Previously Presented) A system as defined in claim 73, wherein the transcoding device is coupled to at least one of the first media consumption device, the second media consumption device, or the media metering device via at least one of a wired network or a wireless network.

93. (Previously Presented) A system as defined in claim 73, wherein at least one of the first media consumption device or the second media consumption device is one of a television, a radio, a personal computer, a personal digital assistant, a telephone, a digital video disk player, or a personal video recorder.

94. (Previously Presented) A system as defined in claim 73, wherein the transcoding device is integrated with at least one of the first media consumption device, the second media consumption device, or the media metering device.

95. (Previously Presented) A system as defined in claim 73, wherein the media metering device is integrated with at least one of the first media consumption device or the second media consumption device.

96. (Original) A system as defined in claim 73 further comprising a server, a database, and a data measurement collection device.

97. (Canceled)

98. (Currently Amended) An apparatus for transcoding metadata included in a media signal conveyed via a home network from a first media format associated with a first media consumption device to a second media format detectable by a media metering device configured to meter a second media consumption device, the apparatus comprising:

means for extracting the metadata from the media signal to form the extracted metadata;

means for querying the media metering device ~~determining~~ via the home network to determine a sensing capability of the [[a]] media metering device to sense a media output signal from the media content consumption associated with a second media consumption device communicatively coupled to the home network, wherein the media metering device is to collect audience measurement data associated with the second media consumption device;

means for identifying the ~~determining~~ a second media format based on the determined capability of the media metering device, ~~to sense media content consumption~~ the second media format detectable by the media metering device;

means for converting the extracted metadata from the [[a]] first media format associated with the [[a]] first media consumption device communicatively coupled to the home network to the identified second media format associated with detectable by the media metering device to form converted media information; and

means to send the converted media information to at least one of the second media consumption device or the media metering device via the home network.

99. (Original) An apparatus as defined in claim 98, wherein the means for converting is configured to convert media content associated with the media signal from a third media format to a fourth media format to form the converted media information.

100. (Currently Amended) An apparatus as defined in claim 98, wherein the means for converting comprises means for identifying ~~at least one of the first media format or the second media format~~ prior to converting the extracted metadata.

101. (Canceled)

102. (Currently Amended) An apparatus as defined in ~~claim 101~~ claim 98, wherein the means for identifying is configured to identify at least one of an audio watermark sensor, a video watermark sensor, a digital bitstream sensor, a database sensor, or a software sensor associated with the media metering device.

103. (Original) An apparatus as defined in claim 98, wherein the means for converting comprises:

means for detecting a watermark associated with the media signal;
means for identifying a signal compression ratio associated with the watermark; and
means for modifying the signal compression ratio based on the second media format.

104. (Previously Presented) An apparatus as defined in claim 103, wherein the means for modifying is configured to compare an output bit rate associated with the signal compression ratio to a network bit rate associated with the home network.

105. (Previously Presented) An apparatus as defined in claim 103, wherein the means for modifying is configured to change an output bit rate based on a network bit rate associated with the home network.

106. (Original) An apparatus as defined in claim 98, wherein the means for converting comprises:

means for generating a watermark based on the second media format; and

means for inserting the watermark in the converted media information.

107. (Previously Presented) An apparatus as defined in claim 106 further comprising means for providing correlation information associated with the watermark and the converted media information to at least one of a data measurement collection device or a data collection facility.

108. (Original) An apparatus as defined in claim 98, wherein the means for converting comprises:

means for encoding the metadata in the second media format; and

means for digitally inserting encoded metadata into a bitstream associated with the converted media information.

109. (Original) An apparatus as defined in claim 98, wherein the means for converting is configured to convert the metadata to cause converted media content to be stored in a database.

110. (Original) An apparatus as defined in claim 98, wherein the means for converting is configured to convert the metadata to cause converted metadata to be extracted from the second media consumption device based on an application program interface associated with the second media consumption device.

111. (Original) An apparatus as defined in claim 98 further comprising means for generating a converted media signal having the converted media information, wherein the converted media information includes at least one of converted media content and converted metadata associated with the converted media content.

112. (Canceled)